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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/879,745 | 06/12/2001 | Barry K. Speronello | | 6496 |

7590

06/14/2006

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EXAMINER

NGUYEN, NGOC YEN M

ART UNIT

PAPER NUMBER

1754

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/879,745

Applicant(s)

SPERONELLO ET AL.

Examiner

Ngoc-Yen M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-16 and 18-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 8, 15, 16 and 18-24 is/are rejected.
- 7) ☒ Claim(s) 9-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claims 9-10 and 11-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art does not teach or suggest a composition for generating chlorine dioxide which includes clays or metakolin microspheres. For claim 9-10, during the impregnating step of the zeolite with an aqueous solution in Klatte, if the zeolite had the same pH as required in the instant claims, than in the presence of water (in the aqueous chlorite solution), chlorine dioxide would have been formed. Thus, zeolite in Klatte must not have the required pH.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-8, 15-16, 18-19, 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Aston (2,482,891).

Aston '891 discloses a composition in which in contact with water evolves chlorine dioxide. The composition is valuable for use in the bleaching of a variety of

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organic materials and especially cellulosic materials (note column 1, lines 1-6). The composition is a solid mixture in which the active ingredients are a salt of chlorous acid and a solid organic acid anhydride. It is rendered stable through the inclusion of a desiccant and it may also contain inert diluent materials. Each of the components of the composition is most preferably present in finely powdered form (note column 1, lines 7-14). The solid organic acid anhydride is a "solid acid" as required in the instant claims.

As disclosed in Example II, a mixture of 25 parts of powdered sodium chlorite, 33 parts of powdered phthalic anhydride and 3 parts of anhydrous calcium chloride gave a stable composition containing 50.2% of available chlorine. The composition liberated chlorine dioxide when added to water (note column 3, lines 38-43). The presence of calcium chloride as a desiccant is not excluded by the presence claims because it is considered as a hydrophilic "salt". It should be noted that presence of a desiccant is required in the instant claims 17, 22, 24. In the event that the presence of a desiccant is excluded by the instant claims, Aston '891 discloses that the presence of a desiccant is to provide a stable solid mixture, thus, it can be deleted along with its attendant function, *In re Wilson*, 153 USPQ 740 (CCPA 1967).

The amount of calcium chloride in the above Example is 3 parts per $(25+33+3=)$ 61 parts or about 4.9%. This value is well within the claimed range. The weight ratio of the metal chlorite to the dry solid hydrophilic material is 25:33 or 0.75:1

The chlorite can be alkali or alkaline earth metal chlorite (note claim 1).

The organic acid anhydride is considered as the dry solid hydrophilic material, and since it is an acid, its pH would inherently be lower than about 10.5 or 9 as required in the instant claims.

For the limitation "for generating chlorine dioxide... 0.001 to 1,000 ppm", it is considered as an intended use limitation and it is not a limitation to be considered in the question of patentability, *In re Hack* 114 USPQ 162. It is well settled that terms merely setting forth intended use for, or a properly inherent in, an otherwise old composition do not differentiate the claimed composition from those disclosed in the prior art. *In re Pearson* 181 USPQ 641. Also, it is contrary to spirit and patent laws that patents be granted for old compositions of matter based on new uses of compositions where uses consists merely in employment of compositions; patentee is entitled to every use of which invention is susceptible, whether such use be known or unknown to him. *In re Thrau*, 57 USPQ 324.

The composition of Aston '891 anticipates the claimed product.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 7, 15-16, 18-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aston '891.

Aston '891 discloses a composition as stated in the above rejection.

For other values or compounds beside those mentioned in the Examples, it would have been within the skill of the artisan to select any known compound and optimize the process condition, including the ratio of sodium chlorite to solid hydrophilic material, in Aston '891 to obtain the best results.

Applicant's arguments filed April 3, 2006 have been fully considered but they are not persuasive.

The terminal disclaimer filed April 3, 2006 has been approved.

Applicants argue that Aston does not disclose a dry solid hydrophilic material as required in Applicants' claims.

It should be noted that Aston discloses "powdered phthalic anhydride", which is considered the same as the required dry solid hydrophilic material. In Applicants' claims the dry hydrophilic material can be a solid acids and suitable solid acids for Applicants' claimed invention includes phthalic anhydride (note Applicants' specification, paragraph bridging pages 7-8, especially page 8, line 10).

The 103 rejection over Aston is maintained for the same reasons as stated above.

The rejection over Klatte is withdrawn in view of Applicants' argument.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc-Yen M. Nguyen whose telephone number is (571) 272-1356. The examiner is currently on Part time schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Stanley Silverman can be reached on (571) 272-1358. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 or (571) 273-8300.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed (571) 272-1700.



Ngoc-Yen M. Nguyen
Primary Examiner
Art Unit 1754

nmn

June 12, 2006